			OIP		2002JP314D		10/s	532,364	-
4: 1	INFOI	RMATION DISCLOSU	IRE OTTATION S	E	Yoshinori NISHIWAK				
ı		(Use several sheets if ne	SEP 2.9 700	g Z)	FILING April 20, 200	G	ROUP To Be	e Assigned	
`			132		T DOCUMENTS				
EXAMINER	\neg	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE	
CH	\dashv	3,666,473	5/30/1972	Colom	et al.				
СН	\dashv	4,115,128	9/19/1978	Kita					
CH	\dashv	4,247,611	1/27/1981	Sander	et al.				
CH3		4,275,139	6/23/1981	Stahlbo	ofen				
CH		4,506,003	3/19/1985	Rucker	rt et al.				
СН		4,506,006	3/19/1985	Rucker	rt				
СН		4,678,737	7/7/1987	Schnell	ler et al.				
СН		6,635,400	10/21/2003	Kato et	t al.				
CH		6,720,128	4/13/2004	Adegav	wa et al.			<u> </u>	
СН		US 2001/0040066 A1	11/22/2001	Kato et	t al.				
СН		US 2003/0039916 A1	2/27/2003	Adegav	wa et al.		<u></u>		
			FORE	EIGN PATI	ENT DOCUMENTS	·		_	
		DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSL	MO
		EP 0 530 654 A1		EMBO	DE				
		GB 2 173 117 A		UNITE	ED-KINGDOM-		+		
		IP 4-192650		JAPAD	N				
		JF 6-43636		JAPAI	N	+	+==		
	F	5 F 11-93433		JAPAT	N				
 		OTHER DOC	:UMENTS (Includia	ng Autho	or, Title, Date, Pertinent	Pages, Etc.,)		
CH		English Languag	e abstract of JP 4-182	≥650. i	unknow	20 [Jate	<u>ح</u>	1
CH		English Languag	ge abstract of 11-0954	35.	unknow) W ()	Dat	e (世
EXAMINE	R /	Primary Examine	r Cynthia Ham	ilton/	DATE CONSIDERED	06/24/2	2006		
'EXAMINE	ER: Initia	izi if reference considered, w	whether or not citation is	is in confor	rmance with MPEP 609; Draw	w line through c	itation if not in	conformance	and not
considered	1. Inctu	ide copy of this form with ne	ext communication to a	pplicant.					

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

RE21 AVAILABLE COPY

40 1	INFO	RMA	TION DISCLOSURE	CITATION		2002JP314D		10/532,364				
		(Us	e severel sheets if necessa	i y)		Yoshinori NISHIWAKI FILING April 20, 2005		ROUP	То Ве	Assigned		
				U.8	. PATENT	DOCUMENTS						
EXAMINER			DOCUMENT NUMBER	DATE	NAME CLASS			SUBCLASS		FILING DATE OF APPROPRIATE		
ONITIAL												
	-											
				·				 	!			
								-	·	 		
	<u> </u>							╂	·			
								<u> </u>	·			
									.			
						·			·			
			-					i	:			
												
	\vdash	 						1				
	├—											
	<u> </u>	<u> </u>	,	E005	ION PATE	ENT DOCUMENTS	<u> </u>	<u>. 1</u>		<u> </u>		
	τ				JOHFAIL	COUNTRY	CLASS	¢: re/	LASS	TRANSI	ATION	
	<u> </u>	_	DOCUMENT NUMBER	DATE				-		YES	NO	
		JP S	2-00022		JAPAN			-				
		51 5	3-133429		JAPAN							
	\vdash	27.5	4-23570		JAPAI							
		JP S	9-73045		JAPAI							
	口	JP :	6-30850		JATAI	†						
	<u> </u>	1	OTHER DOCUME	NTS (Includin	g Autho	r, Title, Date, Pertinent I	Pages, Etc.	, 				
СН			English Language abst	ract of JP 62-124	1556.	Noda	te C	,)`\	er	, 9	J	
CH												
EXAMINE	R	/Pr	imary Examiner (ynthia Ha	milton	DATE CONSIDERED	06/24	/2006				
*EXAMINI	ER: Init	ial if ref	ference considered, whethe	er or not citation is	in confon	mance with MPEP 609; Draw	line through o	itation if	not in c	conformance	and not	

Form PTO-A820 (also form PTO-1449) PO9C/REVOS

Patent and Tredemerk Office, U.S. DEPARTMENT OF COMMERCE

BEST AVAILABLE COPY

		_				ATTY DOCKET NO. 2002JP314D	05	RIAL NO. 10/5	532,364	
~ 'I	INFO!		TION DISCLOSURE (a several sheets if necessa			Yoshinori NISHIWAKI	I et al.			
		100	3 SOTELES SCHOOLS & FRANCE			FIUNG April 20, 2005		ROUP To Be	Assigned	
				u.s	. PATENT	DOCUMENTS				
*EXAMINER INITIAL			DOCUMENT MUNIBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE	
			_							
		-								
	-									
					 			·····		
								<u> </u>		
					 		<u> </u>	 	 	+
,		ļ	<u> </u>		 			 	 	
					<u> </u>		ļ	<u> </u>		
		 				· · · · · · · · · · · · · · · · · · ·		 :		
		<u> </u>		FORE	EIGN PAT	ENT DOCUMENTS	<u> </u>			
	_		DOCUMENT NUMBER	DATE	Τ	COUNTRY	CLASS	SUBCLASS	TRANS	
					JATAS				YES	NO
		Jrs	51-51549		ļ		<u> </u>	<u> </u>		
		37-3	38-114031		JAFA					
	<u> </u>	22.0	30-203444		JACA	+				
		JP-6	1-205033		JABAS	¥				
	F	22.0	02-124550		JAPAI					
	L	<u></u>	OTHER DOCUME	NTS (Includir	ng Autho	or, Title, Date, Pertinent i	Pages, Etc.))		
CH			English Language abst	tract of JP 2001-	-281863.	No Do	te ç	jiver	, (计
CH			English Language abst	tract of JP 2001-	-312060.	No Do	ate	giver	C	1
EXAMINE		·imax	ry Examiner Cynt	hia Hamilt	con/	DATE CONSIDERED	06/24/	2006		
*EXAMINE	ER: Init	ial II ref	ference considered, whether	er or not ditation is	s in confor	mance with MPEP 609; Draw	line through ci	itation if not in o	conformance	and not

Form PTO-A820 (also form PTO-1449)

Copyright 1994-67 LogalStar

POSC/REVOS

Patent and Trademark Office . U.S. DEPARTMENT OF COMMERCE

ن بن						ATTY DOCKET NO. 2002JP314D		SERIAL NO. 10/	532,364		
	INFO		TION DISCLOSURE (se several sheets if necesse			Yoshinori NISHTWAK	I et al.				
		•		•	FILING April 20, 2005			GROUP 'To Be Assigned			
				U.S	. PATEN	T DOCUMENTS		}			
*EXAMINER			DOCUMENT NUMBER	CATE		NAME	CLASS	SUBCLASS	FILING DAT		
	_				1						
	·		•								
	_										
									 -		
		-					<u> </u>		ļ		
		<u> </u>			,	•					
								<u> </u>	<u> </u>		
							ļ				
				FORE	IGN PAT	ENT DOCUMENTS					
			DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANS	NO	
		JP 0	12-213947		JAPA	N					
		37 2	:001-312000		JAPA	N					
			2001_281863	•	JAPA	N					
						N					
		 			UAL A						
		31	1003-207017		JAPA					<u> </u>	
	_		OTHER DOCUME	NTS (Includin	g Auth	or, Title, Date, Pertinent I	Pages, Et	c.)			
					•			·			
EXAMINE	R	/Pri	mary Examiner C	ynthia Ham	ilton	/ DATE CONSIDERED	06/24	1/2006			
'EXAMINE	R; Init	ial (f re	ference considered, whether by of this form with next cor	or not citation is	in confo	rmance with MPEP 609; Draw	line through	citation if not in	conformance	and not	

Form PTO-A820 (also form PTO-1449) Copyright 1994 LegalSter

POSC/REVO3

Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

•	يبر			2002JP314D	_ [SERIAL NO. 	532,364			
	PARO	RMATION DISCLOSURE	CITATION	Yoshinori NISHIWAKI	et al.			•		
		(Use saveral sheets if necess	sary)	FILING		GROUP				
	DUA	3 / 2006 B		April 20, 2005 1752						
	8		U.S.	. PATENT DÖCUMENTS						
*EXAMINER	***************************************	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE	ATE		
CHITCH.										
·										
							<u> </u>			
				· •		· · · · · · · · · · · · · · · · · · ·				
	•	•								
	\vdash					- • • • • • • • • • 				
			<u> </u>				ļ <u>.</u>			
							·			
-				P						
			<u> </u>							
			·		ļ		 			
				,						
	l		FORE	IGN PATENT DOCUMENTS						
;		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSL YES	NO		
СН		EP 0 520 624 A1	12/30/1992	EUROPE						
СН		GB 2 172 117 A	9/10/1986	UNITED KINGDOM	·-					
CH		JP 4-182650.A	6/30/1992	JAPAN				· · · · ·		
CH		JP 6-43650 A	2/18/1994	JAPAN (equivalent to EP 0 520	624 A1)		1			
CE		JP 11-95435 A	4/9/1999	JAPAN	<u> </u>					
		OTHER DOCUM	ENTS (Includir	ng Author, Title, Date, Pertinent	Pages, Et	c.)	· · ·			
CH		English Language	Abstract of JP 11-	95435 A. NoDa	te(Sive	n	1		
CH		English Language	Abstract of JP 52-	#Hugust	25	5,20	06	GH		
EXAMINE	ER /Pr	imary Examiner Cyn	thia Hamilt	on/	. 01/	16/2007		•		
*EXAMIN	IER: Init	ial if reference considered, whet ude copy of this form with next of	her or not citation i	s in conformance with MPEP 609; Draw pplicant.	line through	n citation if not in	conformance	and not		
•		·•								

POSC/REVOX

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

PAGE 1

OF 5

•	••		184 man = -		j	2002JP314D	<u>. </u>	10/5	532,364				
	INFO		ON DISCLOSURE (everal sheets if necessa		L	Yoshinori NISHIWAKI et al.							
				<u>. </u>		FILING April 20, 2005		GROUP	1752				
•				U.S.	. PATENT	DOCUMENTS							
EXAMINER INITIAL		000	CUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE				
					·			T					
					•	Š							
								 					
	-												
				·	 								
				FORE	IGN PÅTE	NT DOCUMENTS							
		DC	OCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSL	ATION NO			
CH		JP 52-8	30022	7/5/1997	JAPAN	(èquivalent to US 4,115	5,128)						
СН		JP 53-1	133429	11/21/1978	JAPAN	(equivalent to US 4,24	7,611)						
СН		JP 54-1	23570 B2	8/15/1979	JAPAN	(equivalent to US 3,666	6,473)						
СН		JP 55-	73045 A	6/2/1980	JAPAN	(equivalent to US 4,27	5,139)						
СН		JP 56-3	30850 B2	7/17/1981	JAPAN	(equivalent to US 4,115	5,128)						
			OTHER DOCUME	NTS (Includir	ng Author	r, Title, Date, Pertinent i	Pages, Et	c.)					
СН			English Language Ab	bstract of JP 54-:	23570 B2.	7/11/2	006	1					
CH V			English Language At	bstract of JP 61-	205933 A.	7/11/2 . 7/11/	201	06					
EXAMINES /P:	R rima	ry Exa	aminer Cynthia	1 Hamilton	/	DATE CONSIDERED	01/16,	/2007					
•EXAMINE	ER: Initi	ial if refere		er or not citation is	s in conform	nence with MPEP 609; Draw	line through	citation if not in	conformance	and not			

POSC/REVOS

•

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

PAGE 2

OF 5

1				•	A	FTY DOCKET NO 2002J	о. JP314D		SERIAL		532,364	
ı	NFO		TION DISCLOSURE (Ţ	oshinori NISI	HIWAKI	et al.				
		(USE) Severai sneets ii necesse	(עי		LING			ROUP			
			<u>.</u>				20, 2005				752	
				. U.Ş.	. PATENT DO	CUMENTS						
*EXAMINER			DOCUMENT NUMBER .	DATE		NAME		CLASS	SU8	CLASS	FILING DATE IF APPROPRI	ATE
									 .			
			•									
+									╫			
									┿		<u> </u>	
					•				ــــــــــــــــــــــــــــــــــــــ		·	
					•	<u>}.</u>				·		
			·									
					<u> </u>	 -			+-			
									+			
					•	<u> </u>		-			<u> </u>	
			•									
			•									
· · · · · · ·			•	FORE	IGN PATEN	T DOCUMENTS						
			DOCUMENT NUMBER	DATE		COUNTRY		CLASS	Su	BCLASS	TRANS	ATION
CH		JP 5	7-37349 A	3/1/1982	JAPAN	equivalent to	US 4,506	,003)				
СН		JP 5	8-114031 A	7/7/1983	JAPAN (equivalent to	US 4,506	,006				
СН		JP 6	0-205444 A	10/17/1985	JAPAN (equivalent to	US 4,678	,73 <i>T</i>)				
СН		JP 6	51-205933 A	9/12/1986	JAPAN (equivalent to	GB 2 172	117 A)				
СН		ЈР 6	62-124556 A	6/5/1987	JAPAN						J.	
			OTHER DOCUME	NTS (Includin	ng Author,	Ţitle, Date, P	ertinent F	Pages, Etc	:.)		٠٠.	
СН			English Language Ab	stract of JP 200			01	ء ان) v	al	$_{3}$ C	11
					Dat	edrinte	<u>, 11 'L</u>	111 4	人 U	06	, 	H
СН			English Language Ab			<u> </u>	10		٦		\ /	GI
i				(Date	Printe	X	17		との(<i>)</i> 6	#
EXAMINEI /P:	R rima	ry E	Examiner Cynthia			DATE CONSIDE	ERED	01/16/	2007			
			ference considered, whether		المسيميا	nce with MPEP	609; Draw	line through	citation	if not in	conformance	and not
considered	d. Incl	ude cor	by of this form with next cor	nmunication to ap	pplicant.	•		,				

Copyright 1994-97 LegalSter

POSC/REVO3

Patent and Trademark Office " U.S. DEPARTMENT OF COMMERCE

PAGE 3

OF 5

P

)					ATTY DOCKET NO. 2002JP31	4 D	SERIAL NO.	532,364				
1		ATION DISCLOSURE (se several sheets if necess.			Yoshinori NISHIW	AKI et al.						
•	,,		,,		FILING	,	GROUP	1757				
			11.0	DATEN	April 20, 2005 1752 PATENT DOCUMENTS							
-EXAMINER	- 		<u> </u>	PAIEN		1						
INITIAL		DOCUMENT NUMBER	DATE		P. NAME	CLASS	SUBCLASS	IF APPROPE	-			
					· · · · · · · · · · · · · · · · · · ·			<u></u>				
ļ				•								
					•		- 	_	-			
		 .			<u> </u>							
			<u> </u>									
			,									
					<u> </u>			<u> </u>				
					14		,					
		•						·				
•			FORE	IGN PAT	ENT DOCUMENTS			•				
•		DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUSCIASS	TRANS	NO			
СН	ЛР	62-215947 A	9/22/1987	JAPAI	٧			J.				
СН	JР	2001-281863 A	10/10/2001	JAPAI	♥ V .:	<u> </u>		1				
ĊН	JP	2001-312060 A	11/9/2001	JAPA				1				
СН	ЛР	2002-229190 A	8/14/2002	1	(equivalent to US of and US 2003/00	コファエロリ			. :			
CH	JР	2002-6503 A	1/9/2002	JAPAI	(equivalent to US 6 and US 2001/00	i,635,400 44066)						
		OTHER DOCUME	NTS (Includin	ng Autho	or, Title, Date, Pertin	ent Pages, E	tc.)		-:			
CH		English Language Ab	stract of JP 2003.	-207017		1:11	· . /-		4			
•				Late	Printel)	<i> </i>	YO OK) 	#			
•		·										
Ü						,			·			
EXAMINE	R /Pr	imary Examiner C	ynthia Ham	ilton	DATE CONSIDERED	01/16/	2007					
		reference considered, wheth opy of this form with next co			mance with MPEP 609; (Oraw line throug	h citation if not in	conformance	e and not			

Copyright 1994 LegalStar

POSC/REVOS

Page 4 OF 5 1/16/07

٨						ATTY DOCKET NO. 2002JP314		SERIAL NO. 10/532,364					
	INFO		TION DISCLOSURE se several sheets if neces			Yoshinori NISHIW	AKI et al.						
		100	y 00-0-10-10-10-10-10-10-10-10-10-10-10-10	· · · · · · · · · · · · · · · · · · ·		FILING April 20, 2	····	GROU		1752	•		
•				U.	S. PATEN	IT DOCUMENTS		L					
*EXAMINER	,	<u> </u>	DOCUMENT NUMBER	. DATE		NAME	CLASS	\$	SUBCLASS	FILING DATE			
4111						Ψ,							
					1								
•		Γ.			1.			\top	•				
	+	 		1.	 			1					
	+	 		1	+			+		 			
	+-	\vdash		+	†	*.		+		 			
	+			+	+	• •		+		+			
	+	\vdash					-	+		+			
	+	-		+	+			+		+			
	+	 		+	+-			+		+			
	+-	┼─	· · · · · · · · · · · · · · · · · · ·	+	+			+	- ;				
•	<u> </u>	<u></u>		FOF	REIGN PA	TENT DOCUMENTS		—					
÷	T	T-	OOCUMENT NUMBER	DATE	T	COUNTRY	CLASS	T	SUBCLASS		SLATION		
CH	+-	m	2003-207017 A	7/25/2003	JAPA			+		YES	NO		
<u> </u>	+-	35 2	.003-207017 74	1/43/4005		<u> </u>	-	+		+			
	┼	-	•	 	-			+		-			
	 	<u> </u>		 	+	• **		+	_ ;	 			
	1	 		 				_	-	<u> </u>	1		
	<u></u>	<u>l .</u>	<u>.</u>							<u> </u>			
<u> </u>		,	OTHER DOCUM	IENTS (includ	ing Auth	nor, Title, Date, Pertine	ant Pages, El	tc.)					
,			,			?					-		
									, <u></u>				
EXAMINE /	ER Prim	ary :	Examiner Cynthi	ia Hamilto	n/	DATE CONSIDERED	01/16	5/20	07				
*EXAMIN consider	IER: Init	dat if ref	ference considered, whether	ther or not citation communication to	is in confo	ormance with MPEP 609; D	Draw line through	h citatic	an if not in	conformance	e and not		

POSC/REVOS

Patent and Trademark Office * U.S. DEPARTMENT OF CONMERCE

PAGE 5

OF 5